

*Mail Room
Date
P-1902*

DECLARATION

I, Richard A. Baker, Jr., declare and say as follows.

I am the Director of Automation Intellectual Property for Schneider Automation Inc. ("Schneider"). I have worked at Schneider and its predecessor corporations for the past eighteen years. For sixteen of those years, I worked in the design and development of industrial control (factory automation) equipment. This work involved the writing of software and the design of various products sold by Schneider and its predecessor corporations.

I have a Bachelor of Science degree from the University of New Hampshire with majors in Computer Science and English and a minor in Electrical Engineering. I have taken graduate courses in Electrical Engineering at the University of Rochester and graduate courses in Applied Mathematics (Computer Science) at Harvard University.

I am a Senior Member of the Institute of Electrical and Electronic Engineers (IEEE) and have been listed in Who's Who in Science and Engineering since the early 1990s.

I have published six technical papers in the subject areas of industrial control (factory automation) and software engineering. I have also presented a paper at the 1997 *International conference on Software Engineering*. In addition, I have published twenty reviews of technical papers in the software subject area for the *Association for Computing Machinery (ACM) Computing Reviews*.

I am a co-inventor of four U.S. patents, namely U.S. Pat. No. 6,484,061 for a *Web interface to a programmable controller*, U.S. Pat. No. 6,282,454 for a *Web interface to a programmable controller*, U.S. Pat. No. 6,151,625 for an *Internet web interface including programmable logic controller for controlling output devices based on status of input devices*, and U.S. Pat. No. 6,061,603 for a *System for remotely accessing an industrial control system over a commercial communications network*, which all have to

do with computer-to-computer communications in industrial control.

Based on my education and experience, I believe that I qualify as a person who is expert in the field of computer-to-computer communication in industrial control (factory automation).

I have reviewed the specification, claims and drawings of U.S. patent application ser. no. 09/454,566 (filed Dec. 7, 1999) for a *Method for adapting a computer-to-computer communication protocol for use in an industrial control system*, as well as the Office action mailed Sept. 24, 2002. In particular I have reviewed claim 1 in the form as referenced in the Office action mailed Sept. 24, 2002, and also in the form it will have after amendment in response to that Office action. This claim is directed to a method for adapting a general purpose query protocol for use by an industrial control system, the industrial control system including a controller for providing control over an industrial process through at least one control element and at least one monitoring element each coupled to the network via a network I/O device, the controller for providing control via a communication network according to an Open Systems Interconnection (OSI) type of network communication model including a transport layer, and in providing such control the controller communicating with the network I/O devices according to the general purpose query protocol. It recites the step of making a permanent-type connection to the network I/O device for the control element or for the monitoring element based on an analysis of communication transactions between the controller and the control element or the monitoring element. The specification discloses the step at page 4, line 27, and at page 12, line 22, and also indicates the step in Fig. 4. From a reading of the specification I understand how the step in claim 1 is performed. Further, it is my opinion, based on my education and experience in the field of industrial control, that any person skilled in the art would understand from the specification and drawings how to perform the step recited in claim 1.

Further, it is also my opinion, based on my education and experience in the field of industrial control, that a necessary consequence of performing the step recited in claim 1 is that the general purpose query protocol, which would ordinarily be used in computer-to-computer communications for making *ad hoc* queries of an external device, is specialized for use by the industrial control system in performing frequent communication of control and monitoring information between the controller and the control element or the monitoring element of the industrial control system. In other words, the invention as claimed in claim 1 does not require a separate step of specializing a general purpose query protocol; the inevitable result of performing the step recited in claim 1 is to specialize the general purpose protocol.

I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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| Richard A. Baker, Jr. Full name of declarant | |
|  Declarant's Signature | <u>22 NOVEMBER 2002</u> Date |
| Massachusetts Residence | US Citizenship |
| Post Office Address: 288 Middle St., West Newbury, MA 01985. | |